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### ADEM Overview

- What types of permits does the Air Division issue?
- What type of permit do I need?
- How do I get a permit?
- How can I avoid problems in the permitting process?

### Types of Permits

#### Air Permits

- Letter of Exemption
- Air Permit
- Air Permit with a public comment period
- PSD and Non-Attainment Permits

### Types of Permits

- Major Source Operating Permit
  - Title V Permit
- Synthetic Minor Source Permit
  - SMOP

### What Do I Need?

#### Two Important Questions

- What types of permits do I need to construct or modify a source?
- What types of permits do I need to operate a source?

### Permits to Construct

#### Air Permits

- Authorize Construction
- Application submittal prior to construction
- Some permits must be issued prior to starting construction:
  - PSD
  - NSR
  - Greenfield Sites
- ALL Air Permits must be issued PRIOR to operation of the source

### Permits to Construct

#### Synthetic Minor Operating Permits

- Authorize construction
- Application submittal prior to construction
- If it is a Greenfield site, then permit must be issued prior to beginning construction
- Other permits must be issued PRIOR to operation of the source

#### Major Source Operating Permits

- In some cases may authorize construction

### Permits to Operate

- The following permits authorize both construction <u>AND</u> operation
  - Letter of Exemption
  - Air Permit
    - Major Sources must apply for Title V (Permanent Operating) Permit within 1 year of beginning operation
  - Air Permit with a public comment period
  - Synthetic Minor Operating Permits (SMOP)

### Permits to Operate

#### PSD/NSR Permit

Major Sources must apply for Title V Permit within 1 year of beginning operation

#### Major Source Operating Permits

Authorizes Operation of the Facility

#### Letter of exemption

- Some new sources have emissions that are so small that <u>NO</u> Air Permit is issued.
- Relevant ADEM Air regulations still apply
- Air Permit applications may be requested so that the decision on whether a permit is required can be made.

#### Air Permit - without Public Notice

- Authorizes a modification or an addition to an existing facility to begin 10 days after ADEM's receipt of a <u>complete</u> application.
- Operation of the project may not begin until the Air Permit is issued.

#### Air Permit – With Public Notice

- If a facility is to be a Greenfield site, a 15 day public comment period (PCP) is required
- PCP also required for certain source types
- Construction may <u>NOT</u> begin until the comment period is over and the Air Permit is issued.

### PSD Permits

#### **Prevention of Significant Deterioration**

- Applicability
  - 100 Tons/year Criteria Pollutants for most large industries (See R. 334-3-14-.04(2)(a) for complete list)
  - 250 Tons/year Criteria Pollutants for other sources not listed in previous cite

### PSD Permits

#### Significance levels

- Potential emission levels that trigger PSD requirements for construction of new or modified units at existing Major Sources, e.g.,
  - 100 TPY CO
  - 40 TPY NOx
  - 40 TPY VOC's
  - 15 TPY PM10
- (See 335-3-14-.04(2)(w) for complete list)

### PSD Permits

#### Components

- Best Available Control Technology (BACT)
  - Economically and Technically feasible
- Ambient Air Quality Modeling
  - NAAQS
  - PSD Increment
- Application submitted for EPA Regional review upon receipt of <u>complete</u> application (30 day review)
- Public Notice (after EPA review)
  - 30-day notice in newspaper of "general" circulation

### New Source Review (NSR)

#### Nonattainment Permitting

#### Applicability

 PMfine – Jefferson, Shelby, and a small portion of Walker and Jackson Counties.

#### Lowest Achievable Emission Rate (LAER)

 Control system that is technically feasible without consideration of cost.

#### - Offsets

 Any major new emissions must be balanced by reductions in the same pollutant.

### ADEM SMOP's

#### Synthetic Minor Operating Permits

- Potential to emit is restricted by permit to less than a major source threshold:
  - Less than 100 TPY of Criteria Pollutants
  - Less than 25 TPY of Total HAPs
  - Less than 10 TPY of any Single HAP

### ADEM SMOP's

#### Elements of a SMOP

- Recordkeeping requirements to support synthetic minor status
- Possible testing to demonstrate emissions rates
- Routine Emissions Reporting

# Major Source Operating Permits (Title V)

- 300 400 largest sources in the State
- Applicability
  - 100 TPY of any Criteria Pollutant
  - 25 TPY of total HAPs
  - 10 TPY of any single HAP

## Major Source Operating Permits (Title V)

- Consolidates provisions of all existing permits at a facility
- Public Notice
  - 30-day Public Notice
  - 45-day EPA Review
- Facility is subject to Emissions Fees

### How Do I Get a Permit?

- Submit an Application
- Department Review
- Fees
- Public Notice
- Permit Decision by ADEM

### ADEM Application

#### Submit an Application to include:

- ADEM 103 Facility Identification Form
  - Signature by Responsible Official
- Process Specific Forms, e.g.
  - ADEM 104 Boilers
  - ADEM 105 General Process
- Complete List of Air Permit Forms
  - adem.alabama.gov

### Application

#### Submit an Application to include:

- ADEM 110 Control Device
  - IF equipped with pollution control device
- Other Information
  - A narrative to describe the process and to enable ADEM to determine what regulations apply.
- Additional Information required for
  - PSD\NSR
  - Title V
  - SMOP

### Application

#### Information to be included:

- Process information
  - Capacity, Size, Material Throughput
- Air rules can be process specific
  - Enough detail to determine applicability
- Emissions information
  - Emission Rate, Basis, other emission data
- Stack parameters
  - Height, Velocity, Diameter, Temperature adem.alabama.gov

### Application

- Submit copies of application for
  - PSD\NSR Application
    - 4 Copies
  - SMOP, Greenfield Air Permit, Title V
    - 3 Copies
  - 1 Copy for Public Review
    - Confidential Information

## ADEM Additional Application Requirements

#### PSD Permit Applications

- BACT Evaluation and Selection
- Emissions Modeling
  - NAAQS
  - Increment

#### NSR Permit Applications

- LAER Evaluation and Selection
- Emissions Modeling
- Offsets

# ADEM Additional Application Requirements

#### SMOP Applications

- Request Appropriate Limitations
  - Less than Major Source Thresholds
- Propose Monitoring
- Propose Recordkeeping

## Additional Application Requirements

#### Title V Permit Applications

- Identify all applicable requirements
- Monitoring
  - Periodic Monitoring
  - Compliance Assurance Monitoring
- Signature by Responsible Official
  - ADEM Admin Code R. 335-3-16-.01(y)
- ADEM Admin. Code R. 335-3-16-.04(8)
  - Complete list of Requirements adem.alabama.gov

### Pre-Application Meeting

- For PSD/NSR Permit Applications a Pre-Application Meeting is Essential
  - Submit a Modeling Protocol
- Pre-Application Meetings for other Sources:
  - Controversial Projects e.g.
    - Quarries, Chemical Plants, Incinerators
  - Other Large Construction Projects

### Application Fee

- Fees set by:
  - ADEM Code R. 335-1-6-.04 Schedule A
- Fees are dependent on applicability
  - Specific Fees for NSPS, MACT, PSD
- Application evaluated to determine fee
- You will be billed for the fee
  - Generally don't send fee with application

#### Common Issues\Problems

- Not using current version of forms
- Not providing process diagrams
- Facility Diagrams
  - Stacks, Units, Distance to Property lines
- Not providing narrative description
  - How it impacts other processes and emissions
- No justification of emission estimates
  - Sample calculations
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#### Common Issues\Problems

- Emissions not Based on 8760 Hrs per year
- Insufficient Information to make a Determination
- Not Addressing MACT or NSPS Applicability
  - Identifying Compliance Options
- Process Weight
  - Failure to Calculate
  - Incorrect Process Weight Parameters
  - The Allowable is the Potential
- Not Providing Stack Data

#### Common Issues\Problems

- Not requesting limits for SMOPs
  - Emission Limit, Operation Limit, Monitoring
- Not identifying applicable requirements
- Not proposing monitoring for Title V
  - Periodic Monitoring
  - CAM
- Copies of application
  - No Public Copy
  - Not Enough Copies

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### Pick up the phone and call your friendly Permit writer!





#### QUESTIONS???